

CLAIMS

WHAT IS CLAIMED IS:

1. A method for uniquely identifying calls on a switched network, said calls having the same Automatic Number Identification (ANI) and dialed number, said method comprising the steps of:

receiving a first request for service for a first call, said first request including a first ANI and a first dialed number for said first call;

selecting a first code from a pool of codes corresponding to said first dialed number;

returning a first response to said first request, said first response including said first code;

receiving a second request for service for a second call, said second request including said first ANI and said first dialed number for said second call;

selecting a second code from said pool of codes; and

returning a second response to said second request, said second response including said second code; whereby

components of said network can uniquely identify said first and second calls when exchanging information in regard to said calls from respective combinations of said first ANI with said first code and with said second code.

2. A method as described in claim 1 comprising the further steps of:

providing a call response system for further processing of said call, said call response system including a data structure mapping codes in said pool to said first dialed number;

controlling said call response system, to receive an ANI and a particular code selected from said pool;

controlling said call response system to access said data structure and map said particular code to said first dialed number; and

thereafter controlling said call response system to process said call in accordance with said first dialed number.

3. A method as described in claim 2 wherein said call response system is an Interactive Voice Response system.

4. A method as described in claim 2 comprising the further steps of:
determining if said first code is pending;
selecting said first code only if it is not pending; and
then storing an indication that said first code is pending.

5. A method as described in claim 4 comprising the further steps of:
receiving a call arrival message for said first call from said call response system; and
then clearing said indication that said first code is pending.

6. A method as described in claim 5 wherein said service request includes a Network Call ID and said call received message includes a call response system call ID, said method comprising the further step of mapping said call response system call ID to said Network Call ID.

7. A method as described in claim 1 comprising the further steps of:
receiving a third request for service for a third call, said third request including a second dialed number for said third call;
determining that a pool of codes corresponding to said second dialed number does not exist;
returning a third response to said third request, said first response including a base DNIS corresponding to said second dialed number.

8. A method for uniquely identifying calls on a switched network, said calls having the same ANI and dialed number, said method comprising:
a step for receiving a first request for service for a first call, said first request including a first ANI and a first dialed number for said first call;
a step for selecting a first code from a pool of codes corresponding to said first dialed

number;

a step for returning a first response to said first request, said first response including said first code;

a step for receiving a second request for service for a second call, said second request including said first ANI and said first dialed number for said second call;

a step for selecting a second code from said pool of codes; and

a step for returning a second response to said second request, said second response including said second code; whereby

components of said network can uniquely identify said first and second calls when exchanging information in regard to said calls from respective combinations of said first ANI with said first code and with said second code.

9. A component system for responding to service requests for calls in a switched network, said component system comprising programmable means for:

receiving a first request for service for a first call, said first request including a first ANI and a first dialed number for said first call;

selecting a first code from a pool of codes corresponding to said first dialed number;

returning a first response to said first request, said first response including said first code;

receiving a second request for service for a second call, said second request including said first ANI and said first dialed number for said second call;

selecting a second code from said pool of codes; and

returning a second response to said second request, said second response including said second code; whereby

components of said network can uniquely identify said first and second calls when exchanging information in regard to said calls from respective combinations of said first ANI with said first code and with said second code.

10. A component system as described in claim 9 wherein said programmable means is further for:

determining if said first code is pending;

selecting said first code only if it is not pending; and
then storing an indication that said first code is pending.

11. A component system as described in claim 10 wherein said programmable means is further for:

receiving a call arrival message for said first call from a call response system; and
then clearing said indication that said first code is pending.

12. A component system as described in claim 11 wherein said service request includes a Network Call ID and said call received message includes a call response system call ID, said method further comprising means for mapping said call response system call ID to said Network Call ID.

13. A call response system for receiving calls from a switched network and returning a call arrival signal to said network, said call response system comprising programmable means for controlling said call response system to:

receive an ANI and a code selected from said pool;
access said data structure and map said code to a corresponding dialed number; and
thereafter process said call in accordance with said corresponding dialed number.

14. An Interactive Voice Response system for receiving calls from a switched network and returning a call arrival signal to said network, said Interactive Voice Response system comprising programmable means for controlling said Interactive Voice Response system to:

receive an ANI and a code selected from said pool;
access said data structure and map said code to a corresponding dialed number; and
process said call in accordance with said corresponding dialed number.

15. A network component comprising programmable means for:
receiving a Park Response including a dialed number;
determining a DNIS value corresponding to said dialed number;

determining if said Park Response includes DNIS override digits; and
if said Park Response includes a DNIS override digits, sending said Park Response and
said DNIS override digits to a network switch; and otherwise
sending said Park Response and said DNIS value to said network switch.

16. A computer-readable medium carrying one or more sequences of one or more
instructions for controlling a component system for responding to service requests for calls in a
switched network to:

receive a first request for service for a first call, said first request including a first ANI
and a first dialed number for said first call;

select a first code from a pool of codes corresponding to said first dialed number;

return a first response to said first request, said first response including said first code;

receive a second request for service for a second call, said second request including said
first ANI and said first dialed number for said second call;

select a second code from said pool of codes; and

return a second response to said second request, said second response including said
second code; whereby

components of said network can uniquely identify said first and second calls when
exchanging information in regard to said calls from respective combinations of said first ANI
with said first code and with said second code.

17. A computer-readable medium as described in claim 16 carrying one or more
sequences of one or more instructions for further controlling said component system to:

determine if said first code is pending;

select said first code only if it is not pending; and

then store an indication that said first code is pending.

18. A computer-readable medium as described in claim 17 carrying one or more
sequences of one or more instructions for further controlling said component system to:

receive a call arrival message for said first call from said call response system; and

then clear said indication that said first code is pending.

19. A computer-readable medium as described in claim 18, wherein said service request includes a Network Call ID and said call received message includes a call response system call ID, said computer-readable medium carrying one or more sequences of one or more instructions for further controlling said component system to map said call response system call ID to said Network Call ID.

20. A computer-readable medium carrying one or more sequences of one or more instructions for controlling a call response system for further processing of calls from a switched network, said call response system including a data structure mapping codes in a pool to a corresponding dialed number, to:

receive an ANI and a code selected from said pool;
control said call response system to access said data structure and map said code to said corresponding dialed number; and
thereafter process said call in accordance with said first dialed number.

21. A computer-readable medium carrying one or more sequences of one or more instructions for controlling a component system for responding to service requests for calls in a switched network to:

receive a Park Response including a dialed number;
determine a DNIS value corresponding to said dialed number;
determine if said Park Response includes DNIS override digits; and
if said Park Response includes a DNIS override digits, send said Park Response and said DNIS override digits to a network switch; and otherwise send said Park Response and said DNIS value to said network switch.